

selecting one or more reference points for the hovering field. For example, the apparatus **100** may be configured to define the center point of a side of the mobile computing device **200** as a first reference point of the hovering field **350** and the center point of the mobile computing device as a second reference point of the hovering field **350**.

**[0066]** User inputs in a hovering field may be detected by a hover sensor surface. The hover sensor surface may comprise, for example, an array of sensors providing a hovering field. The hover sensor surface is configured to detect an object hovering over the surface. As another example, the hover sensor surface may comprise, for example, flexible film material **340** wrapped around the mobile computing device **200** in order to provide a hovering field on each side of the mobile computing device **200**. As a further example, the mobile computing device **200** may be made of a flexible material wherein the hover sensor surface is integrated.

**[0067]** According to an example embodiment, the apparatus **100** is configured to associate a first item with a first portion of the hovering field. Associating a first item with a first portion of a hovering field may comprise providing by the apparatus **100** a virtual first item representing an item stored in the mobile computing device **200** or a server. The virtual item is selectable by a user by selecting the first portion in the hovering field. The apparatus **100** is configured to select the item stored in the mobile computing device **200**/server in response to selecting the virtual item, the virtual item being representative of the item stored in the mobile computing device **200**/server. According to an example embodiment, a virtual item in a hovering field provided by an apparatus **100** and comprised by a mobile computing device **200** may be a representative of an item stored on a server. In other words, the hovering field at least partially encompassing the mobile computing device **200** may be used as an interface for accessing items on a server.

**[0068]** The apparatus **100** may also be configured to associate a second item with a second portion of the hovering field. Similarly to associating a first item with a first portion of the hovering field, associating a second file with a second portion of a hovering field may comprise providing by the apparatus **100** a virtual second item representative of a second item stored in the mobile computing device **200**/server and being selectable by a user by selecting the second portion in the hovering field. The relative positions of the first portion and the second portion may correspond to the relative positions of the first item and the second item in a data structure. The data structure may be comprised by the mobile computing device **200** or a server. The data structure may comprise a file structure such as a hierarchical structure comprising parent nodes and child nodes. In an example embodiment, the first file is a song and the second file is a music album comprising the song.

**[0069]** The first item and/or the second item may comprise, for example, a data item such as a file, a folder, a data structure or portion of a data structure, selectable items within a menu system, or the like. A file may comprise any suitable file such as a media file, a picture file, a text file or the like.

**[0070]** Without limiting the scope of the claims, an advantage of associating one or more files with a hovering field may be that a file structure is spatially expanded and selecting items in the file structure may be easier for the user.

**[0071]** According to an example embodiment, a hover sensor surface is provided on the mobile computing device **200** and the apparatus **100** is operatively connected to the hover

sensor surface. The apparatus **100** is configured to receive information about the selecting object within the hovering field, detected by the hover sensor surface. The apparatus **100** is further configured to receive an indication of a distance between the reference point and the selecting object and/or receive an indication of coordinate data of the selecting object.

**[0072]** According to an example embodiment, an item associated with a portion of the hovering field may be selected by selecting a virtual item representative of an item stored in the mobile computing device **200**/server based on three dimensional (3D) coordinate data such as X, Y and Z coordinate data. In this example, Z coordinate data represents the depth dimension of the hovering field. X and Y coordinate data represent a target point or a target area on the hover sensor surface. For example, a target point or a target area may comprise a point or an area, respectively, on the hover sensor surface that is selected by the selecting object when Z coordinate data of the selecting object is zero (e.g. when the selecting object touches the hover sensor surface). The apparatus **100** is configured to select the item associated with a portion of the hovering field when the X, Y and Z coordinate data of the selecting object correspond to X, Y and Z coordinate data of the virtual item representative of the item stored in the mobile computing device **200**/server.

**[0073]** According to another example embodiment, a portion of the hovering field may be selected based on a distance between a selecting object (e.g. a finger, a stylus or a digital pen) and a reference point for the hovering field. For example, if the hovering field comprises multiple portions such as layers, a portion may be selected based on the distance between a selecting object and a reference point. It should be noted that, if an item associated with a portion of the hovering field corresponds to a whole layer, the virtual item representative of the item stored in the mobile computing device **200**/server may be selected solely based on the distance between the selecting object and the reference point. The apparatus **100** is configured to select the portion of the hovering field when the distance between the selecting object and the reference point correspond to a distance between the layer and the reference point. Therefore, the apparatus **100** may be configured to select an item associated with a portion of the hovering field and/or a portion of the hovering field based on X, Y or Z coordinate data, a distance between a selecting object and a reference point, or any combination thereof.

**[0074]** The origin of the X, Y and Z coordinate axes may comprise a reference point for the hovering field. In some examples, the apparatus **100** may be configured to define multiple origins if multiple reference points for the hovering field are provided. Hence, the apparatus **100** may be configured to receive an indication of a three dimensional (3D) hovering gesture.

**[0075]** According to an example embodiment, the apparatus **100** may be configured to select an item stored in the mobile computing device **200**/server in response to receiving an indication that a user has selected a portion with which the item is associated. On the other hand, the apparatus **100** may be configured to select a portion of the hovering field in response to receiving an indication that a user has selected a portion of the hovering field with which no item is associated.

**[0076]** Without limiting the scope of the claims, an advantage of selecting a portion based on a distance between a selecting object and the mobile computing device **200** may be that a user does not need to go through complex menu, file or